

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re Application of:**

Havenga et al.

**Serial No.:** To be assigned

**Filed:** August 22, 2003

**For:** GENE DELIVERY VECTORS  
PROVIDED WITH A TISSUE TROPISM  
FOR DENDRITIC CELLS AND METHODS  
OF USE

**Examiner (presumed):** M. Marvich, Ph.D.

**Group Art Unit (presumed):** 1636

**Attorney Docket No.:** 2578-4489.1US

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence along with any attachments referred to or identified as being attached or enclosed is being deposited with the United States Postal Service as First Class Mail on the date of deposit shown below with sufficient postage and in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231.

August 22, 2003  
Date

Signature

Betty Vowles  
Name (Type/Print)

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO/SB/08A be considered by the Examiner and made of record. Copies of the listed documents are enclosed pursuant to 37 C.F.R. § 1.98(a).

In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b). Further, no representation is made by Applicants herein that no other possible material information as defined in 37 C.F.R. § 1.56(b) exists.

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<u>U.S. Patent No.</u>	<u>Publication Date</u>	<u>Patentee</u>
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<u>U.S. Patent No.</u>	<u>Publication Date</u>	<u>Patentee</u>
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<u>Document No.</u>	<u>Publication Date</u>	<u>Patentee</u>
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WO 94/17832 #	08/14/1994	PCT
WO 94/24299 #	10/27/1994	PCT
WO 94/26915 #	11/24/1994	PCT
WO 95/05201 #	02/23/1995	PCT
WO 95/06745 #	03/09/1995	PCT
WO 95/14785 #	06/01/1995	PCT
WO 95/16037 #	06/15/1995	PCT
WO 95/21259 #	08/10/1995	PCT
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<u>Document No.</u>	<u>Publication Date</u>	<u>Patentee</u>
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#Pursuant to 37 C.F.R. § 1.98(d), copies of the previously identified patents are not being provided since they were previously cited by or submitted to the Office in the following prior application:

Serial No.: 09/348,354  
Filed: July 7, 1999  
For: CHIMAERIC ADENOVIRUSES

and Serial No.: 09/665,472  
File September 20, 2000  
For: GENE DELIVERY VEHICLES PROVIDED WITH A TISSUE TROPISM FOR DENDRITIC CELLS.

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56 & 1.175, Applicants offer hereby identifies the following listed copending applications naming the same inventor(s):

Attorney Docket No.: 2578-3840US  
Serial No.: 09/065,752  
Filing Date: 4/24/1998  
Title: **PACKAGING SYSTEMS FOR HUMAN RECOMBINANT ADENOVIRUS TO BE USED IN GENE THERAPY**

Attorney Docket No.: 2578-4230US  
Serial No.: 09/214,836  
Filing Date: 10/4/1999  
Title: **MELANOMA ASSOCIATED PEPTIDE ANALOGUES AND VACCINES AGAINST MELANOMA**

Attorney Docket No.: 2578-4075US  
Serial No.: 09/332,803  
Filing Date: 6/14/1999  
Title: **PACKAGING SYSTEMS FOR HUMAN RECOMBINANT ADENOVIRUS TO BE USED IN GENE THERAPY**

Attorney Docket No.: 2578-4123.2US  
Serial No.: 09/348,354  
Filing Date: 7/7/1999  
Title: **CHIMAERIC ADENOVIRUSES**

Attorney Docket No.: 2578-4231US  
Serial No.: 09/444,284  
Filing Date: 11/19/1999  
Title: GENE DELIVERY VECTORS PROVIDED WITH A TISSUE TROPISM FOR SMOOTH MUSCLE CELLS, AND/OR ENDOTHELIAL CELLS

Attorney Docket No.: 2578-3982.2US  
Serial No.: 09/517,898  
Filing Date: 3/3/2000  
Title: MEANS AND METHODS FOR FIBROBLAST-LIKE OR MACROPHAGE-LIKE CELL TRANSDUCTION

Attorney Docket No.: 2578-4038.1US  
Serial No.: 09/549,463  
Filing Date: 4/14/2000  
Title: RECOMBINANT PROTEIN PRODUCTION IN A HUMAN CELL

Attorney Docket No.: 2578-4070.1US  
Serial No.: 09/573,740  
Filing Date: 5/18/2000  
Title: SEROTYPES OF ADENOVIRUS AND USES THEREOF

Attorney Docket No.: 2578-4192.1US  
Serial No.: 09/657,492  
Filing Date: 9/8/2000  
Title: MODIFIED ADENOVIRAL VECTORS FOR USE IN GENE THERAPY

Attorney Docket No.: 2578-4489US  
Serial No.: 09/665,472  
Filing Date: 9/20/2000  
Title: GENE DELIVERY VECTORS PROVIDED WITH A TISSUE TROPISM FOR DENDRITIC CELLS

Attorney Docket No.: 2578-4843US  
Serial No.: 09/843,894  
Filing Date: 4/27/2001  
Title: AAV VECTOR PRODUCTION

**Attorney Docket No.: 2578-4489.1US**

Attorney Docket No.: 2578-3840.1US  
Serial No.: 09/900,062  
Filing Date: 7/6/2001  
Title: PACKAGING SYSTEMS FOR HUMAN RECOMBINANT  
ADENOVIRUS TO BE USED IN GENE THERAPY

Attorney Docket No.: 2578-3935.1US  
Serial No.: 09/912,552  
Filing Date: 7/23/2001  
Title: PACKAGING SYSTEMS FOR HUMAN RECOMBINANT  
ADENOVIRUS TO BE USED IN  
GENE THERAPY

Attorney Docket No.: 2578-3833.5US  
Serial No.: 09/918,029  
Filing Date: 7/30/2001  
Title: PACKAGING SYSTEMS FOR HUMAN RECOMBINANT  
ADENOVIRUS TO BE USED IN GENE THERAPY

Attorney Docket No.: 2578-4509.1US  
Serial No.: 09/928,262  
Filing Date: 8/10/2001  
Title: GENE DELIVERY VECTORS WITH CELL TYPE SPECIFICITY  
FOR PRIMARY HUMAN CHONDROCYTES

Attorney Docket No.: 2578-4123.1US  
Serial No.: 09/953,280  
Filing Date: 9/14/2001  
Title: CHIMAERIC ADENOVIRUSES

Attorney Docket No.: 2578-5148US  
Serial No.: 10/002,750  
Filing Date: 11/15/2001  
Title: COMPLEMENTING CELL LINES

Attorney Docket No.: 2578-5006.1US  
Serial No.: 10/010,645  
Filing Date: 11/13/2001  
Title: GENE DELIVERY VECTORS WITH CELL TYPE SPECIFICITY  
FOR MESENCHYMAL STEM CELLS

**Attorney Docket No.: 2578-4489.1US**

Attorney Docket No.: 2578-3833.6US  
Serial No.: 10/038,271  
Filing Date: 10/23/2001  
Title: PACKAGING SYSTEMS FOR HUMAN RECOMBINANT ADENOVIRUS TO BE USED IN GENE THERAPY

Attorney Docket No.: 2578-5226US  
Serial No.: 10/040,949  
Filing Date: 1/7/2002  
Title: INFECTION WITH CHIMAERIC ADENOVIRUSES OF CELLS NEGATIVE FOR THE ADENOVIRUS SEROTYPE 5 COXSACKI ADENOVIRUS RECEPTOR (CAR)

Attorney Docket No.: 2578-5233US  
Serial No.: 10/042,770  
Filing Date: 1/9/2002  
Title: GENE THERAPY FOR ENHANCING AND/OR INDUCING ANGIOGENESIS

Attorney Docket No.: 2578-3833.7US  
Serial No.: 10/125,751  
Filing Date: 4/18/2002  
Title: PACKAGING SYSTEMS FOR HUMAN RECOMBINANT ADENOVIRUS TO BE USED IN GENE THERAPY

Attorney Docket No.: 2578-3955.1US  
Serial No.: 10/136,139  
Filing Date: 5/1/2002  
Title: MEANS AND METHODS FOR NUCLEIC ACID DELIVERY VEHICLE DESIGN AND NUCLEIC ACID TRANSFER

Attorney Docket No.: 2578-4615.1US  
Serial No.: 10/164,085  
Filing Date: 6/4/2002  
Title: COMPLEMENTING CELL LINES

Attorney Docket No.: 2578-3833.8US  
Serial No.: 10/219,414  
Filing Date: 8/15/2002  
Title: STOCKS OF REPLICATION DEFICIENT ADENOVIRUS

**Attorney Docket No.: 2578-4489.1US**

Attorney Docket No.: 2578-5233.1US  
Serial No.: 10/224,249  
Filing Date: 8/19/2002  
Title: GENE THERAPY FOR ENHANCING AND/OR INDUCING ANGIOGENESIS

Attorney Docket No.: 2578-4215.1US  
Serial No.: 10/231,735  
Filing Date: 8/28/2002  
Title: INTERLEUKIN-3 GENE THERAPY FOR CANCER

Attorney Docket No.: 2578-4038.2US  
Serial No.: 10/234,007  
Filing Date: 9/3/2002  
Title: RECOMBINANT PROTEIN PRODUCTION IN A HUMAN CELL

Attorney Docket No.: 2578-4080.1US  
Serial No.: 10/235,175  
Filing Date: 9/4/2002  
Title: TARGETED DELIVERY THROUGH A CATIONIC AMINO ACID TRANSPORTER

Attorney Docket No.: 2578-4615.2US  
Serial No.: 10/272,041  
Filing Date: 10/15/2002  
Title: COMPLEMENTING CELL LINES

Attorney Docket No.: 2578-5592US  
Serial No.: 10/305,435  
Filing Date: 11/25/2002  
Title: METHODS AND MEANS FOR ENHANCING SKIN TRANSPLANTATION USING GENE DELIVERY VEHICLES HAVING TROPISM FOR PRIMARY FIBROBLASTS, AS WELL AS OTHER USES THEREOF (PRIMAIRE FIBROBLASTEN)

Attorney Docket No.: 2578-5832US  
Serial No.: 10/381,088  
Filing Date: 3/20/2003  
Title: ADENOVIRAL VECTORS PROVIDED WITH A TROPISM FOR DENDRITIC CELLS

**Attorney Docket No.: 2578-4489.1US**

Attorney Docket No.: 2578-5904US  
Serial No.: 10/381,857  
Filing Date: 3/26/2003  
Title: ADENOVIRAL VECTORS FOR GENE DELIVERY IN SKELETAL MUSCLE CELLS OR MYOBLASTS

Attorney Docket No.: 2578-3840.2US  
Serial No.: 10/396,548  
Filing Date: 3/25/2003  
Title: PACKAGING SYSTEMS FOR HUMAN RECOMBINANT ADENOVIRUS TO BE USED IN GENE THERAPY

Attorney Docket No.: 2578-3833.9US  
Serial No.: 10/618,526  
Filing Date: 7/11/2003  
Title: PACKAGING SYSTEMS FOR HUMAN RECOMBINANT ADENOVIRUS TO BE USED IN GENE THERAPY

This Information Disclosure Statement is filed before the mailing date of the first Office Action on the merits.

Respectfully submitted,



Allen C. Turner  
Registration No. 33,041  
Attorney for Applicants  
TRASKBRITT, P.C.  
P.O. Box 2550  
Salt Lake City, Utah 84110-2550  
Telephone: 801-532-1922

Date: April 3, 2003  
ACT/jml/bv

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Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

1

of

9

## Complete if Known

Application Number	To be assigned
Filing Date	August 22, 2003
First Named Inventor	Havenga et al.
Group Art Unit	1636 (presumed)
Examiner Name	Maria Marvich, Ph.D. (presumed)

Attorney Docket Number

2578-4489.1US

## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		US- 4,487,829	12/11/1984	Sharp et al.	
		US- 4,517,686	05/21/1985	Ruoslahti et al.	
		US- 4,578,079	03/25/1986	Ruoslahti et al.	
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		US- 4,956,281	09/11/1990	Wallner et al.	
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		US- 5,403,484	04/04/1995	Ladner et al.	

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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		259212	03/09/1988	EP		
		2078631	03/19/1990	JP		
		WO 91/00360	01/10/1991	PCT		
		WO 91/05805	05/02/1991	PCT		
		WO 91/05871	05/02/1991	PCT		
		WO 92/02553	02/20/1992	PCT		
		WO 92/13081	08/06/1992	PCT		
		WO 93/03769	03/04/1993	PCT		
		WO 93/06223	04/01/1993	PCT		

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Substitute for form 1449A/PTO				<i>Complete if Known</i>	
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				Examiner Name	Maria Marvich, Ph.D. (presumed)
Sheet	2	of	9	Attorney Docket Number	2578-4489.1US

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		US-5,436,146	07/25/1995	Shenk et al.	
		US- 5,443,953	08/22/1995	Hansen et al.	
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		WO 93/07282	04/15/1993	PCT	
		WO 93/07283	04/15/1993	PCT	
		WO 94/08026	04/14/1994	PCT	
		WO 94/10323	05/11/1994	PCT	
		WO 94/11506	05/26/1994	PCT	
		WO 94/15644	07/21/1994	PCT	
		WO 94/17832	08/14/1994	PCT	
		WO 94/24299	10/27/1994	PCT	
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		WO 95/06745	03/09/1995	PCT	
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		WO 96/07739	03/14/1996	PCT	
		WO 96/10087	04/04/1996	PCT	
		WO 96/13597	05/09/1996	PCT	
		WO 96/14837	05/23/1996	PCT	
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		MASTRANGELI et al., "In Vivo Gene Transfer to the Lung of Experimental Animals Using a Chimeric Ad5/Ad7 Adenovirus Vector," Ped. Pulm., Suppl., 12, 230, Abst. No. 180 (1995).		
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

8

of

9

*Complete if Known*

Application Number	To be assigned
Filing Date	August 22, 2003
First Named Inventor	Havenga et al.
Group Art Unit	1636 (presumed)
Examiner Name	Maria Marvich, Ph.D. (presumed)
Attorney Docket Number	2578-4489.1US

## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
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		WADELL, G., "Molecular Epidemiology of Human Adenoviruses," <i>Curr. Top. Microbiol. Immunol.</i> , 110, 191-220 (1984).	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		Application Number		To be assigned	
		Filing Date		August 22, 2003	
		First Named Inventor		Havenga et al.	
		Group Art Unit		1636 (presumed)	
		Examiner Name		Maria Marvich, Ph.D. (presumed)	
Sheet	9	of	9	Attorney Docket Number	2578-4489.1US

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		WAGNER et al., "Coupling of adenovirus to transferrin-polylysine/DNA complexes greatly enhances receptor-mediated gene delivery and expression of transfected genes," Proc. Natl. Acad. Sci. USA, 89, 6099-6103 (1992).		
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		International Search Report, International Application No. PCT/EP01/10999, dated March 26, 2002 (6 pages).		
		PCT International Preliminary Examination Report, PCT/EP01/10999, dated September 23, 2002, 11 pages.		

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